



Public Utilities Commission

Case No.: 09-1042-EL-REN

AFFIDAVIT

State of Ohio :

Oregon ss.
(Town)

County of Lucas County :

Charles R. Ferrell, Jr., Affiant, being duly sworn/affirmed according to law, deposes and says that:

1. I am the duly authorized representative of Bayshore Power Company / Bay Shore Unit 1.
2. I have personally examined and am familiar with all information contained in the foregoing application, including any exhibits and attachments, and that based upon my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
3. The facility has obtained or will obtain and will maintain all required local, state and federal environmental permits.
4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Charles R. Ferrell Jr. - Director, Bay Shore Plant
Signature of Affiant & Title

Sworn and subscribed before me this 2nd day of November, 2009

Daniel K. Roggell
Signature of official administering oath

Daniel K. Roggell
Notary Public, State of Ohio
Commission Expires 3-5-2012

Print Name and Title

My commission expires on 3-5-2012



Public Utilities Commission

Case No.: 09 - 1042-EL-REN

AFFIDAVIT

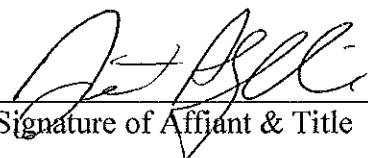
State of Ohio :

Akron ss.
(Town)

County of Summit :

David L. Plusquellic, Affiant, being duly sworn/affirmed according to law, deposes and says that:

1. I am the duly authorized representative of FirstEnergy Solutions.
2. I have personally examined and am familiar with all information contained in the foregoing application, including any exhibits and attachments, and that based upon my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
3. The facility has obtained or will obtain and will maintain all required local, state and federal environmental permits.
4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

 - Manager, Renewables
Signature of Affiant & Title

Sworn and subscribed before me this 3rd day of November, 2009 Month/Year


Signature of official administering oath

MARIE SAVULA, NOTARY
Print Name and Title

My commission expires on 7-27-2010



Case No.: 09 – 1042 - EL-REN

A. Name of Renewable Generating Facility: Bay Shore Unit 1

The name specified will appear on the facility's certificate of eligibility issued by the Public Utilities Commission of Ohio.

Facility Location Lucas County, Ohio

Street Address: 4701 Bay Shore Rd.

City: Oregon State: OH Zip Code: 43616

Facility Latitude and Longitude

Latitude: 41.6830

Longitude: -83.3951

There are internet mapping tools available to determine your latitude and longitude, if you do not have this information.

If applicable, U.S. Department of Energy, Energy Information Administration Form EIA-860 Plant Name and Plant Code.

EIA-860 Plant Name: Bay Shore Unit 1

EIA Plant Code: 2878

B. Name of the Facility Owner Bay Shore Power Company and FirstEnergy Generation Corp.

Please note that the facility owner name listed will be the name that appears on the certificate. The address provided in this section is where the certificate will be sent.

If the facility has multiple owners, please provide the following information for each on additional sheets.

Applicant's Legal Name (First Name, MI, Last Name): David L. Plusquellic

Title: Manager of Renewable Energy Portfolio

Organization: FirstEnergy Solutions Corp.

Street Address: 341 White Pond Drive

City: Akron State: OH Zip Code: 44320

Country: USA

Phone: 330-315-7225 Fax: 330-436-1901

Email Address: plusquellicd@firstenergycorp.com

Web Site Address (if applicable): www.firstenergysolutions.com

Legal Name of Contact Person (First Name, MI, Last Name): Charles R. Ferrell, Jr.

Title: Director of Bayshore Plant

Organization: Bay Shore Power Company

Street Address: 4701 Bay Shore Rd.

City: Oregon State: OH Zip Code: 43616

Country: USA

Phone: **419-249-5882** Electronic Fax: **330-245-5739**

Email Address: cferrell@firstenergycorp.com

Web Site Address (if applicable):): www.firstenergysolutions.com

Bay Shore Power Company is a wholly owned subsidiary of FirstEnergy Ventures Corp., which is, in turn, a wholly owned subsidiary of FirstEnergy Corp. Bay Shore Power Company owns and operates a fluidized bed boiler, limestone handling equipment, fuel handling equipment, ash handling/storage equipment, steam pipe, piping, valves, meters and other equipment necessary to generate, deliver, and measure steam that is delivered and sold to FirstEnergy Generation Corp. FirstEnergy Generation Corp. uses the steam supplied by the Bay Shore Power Company to power a turbine generator used to produce electricity from Bay Shore Unit 1.

FirstEnergy Generation Corp. is a wholly owned subsidiary of FirstEnergy Solutions Corp. FirstEnergy Generation Corp. purchases steam from the Bay Shore Power Company and uses it to produce electricity from Bay Shore Unit 1. The entire electrical output of Bay Shore Unit 1, including environmental attributes, is sold to FirstEnergy Solutions Corp.

C. List name, address, telephone number and web site address under which Applicant will do business in Ohio.

Applicant's Legal Name: David L. Plusquellic
Title: Manager of Renewable Energy Portfolio
Organization: FirstEnergy Solutions Corp.
Street Address: 341 White Pond Drive
City: Akron State: OH Zip Code: 44320
Country: USA
Phone: 330-315-7225 Fax: 330-436-1901
Email Address: plusquellicd@firstenergycorp.com
Web Site Address (if applicable): www.firstenergysolutions.com

D. Name of Generation Facility Operating Company: Bay Shore Power Company and FirstEnergy Generation Corp.

Legal Name of Contact Person (First Name, MI, Last Name): Charles R. Ferrell, Jr.
Title: Director of Bayshore Plant
Organization: Bay Shore Power Company
Street Address: 4701 Bay Shore Rd.
City: Oregon State: OH Zip Code: 43616
Country: USA
Phone: **419-249-5882** Electronic Fax: **330-245-5739**
Email Address: cferrell@firstenergycorp.com
Web Site Address (if applicable):): www.firstenergysolutions.com

Legal Name of Contact Person: David L. Plusquellic
Title: Manager of Renewable Energy Portfolio
Organization: FirstEnergy Solutions Corp.
Street Address: 341 White Pond Drive
City: Akron State: OH Zip Code: 44320
Country: USA
Phone: 330-315-7225 Fax: 330-436-1901
Email Address: plusquellicd@firstenergycorp.com
Web Site Address (if applicable): www.firstenergysolutions.com

E. Contact person for regulatory or emergency matters

Legal Name of Contact Person (First Name, MI, Last Name): Charles R. Ferrell, Jr.

Title: Director of Bayshore Plant

Organization: Bay Shore Power Company

Street Address: 4701 Bay Shore Rd.

City: Oregon State: OH Zip Code: 43616

Country: USA

Phone: **419-249-5882** Electronic Fax: **330-245-5739**

Email Address: cferrell@firstenergycorp.com

Web Site Address (if applicable):): www.firstenergysolutions.com

F. Certification Criteria 1: Deliverability of the Generation into Ohio

Ohio Revised Code (ORC) Sec. 4928.64(B)(3)

The facility must have an interconnection with an electric utility.

Check which of the following applies to your facility's location:

☒ The facility is located in Ohio.

☐ The facility is located in a state geographically contiguous to Ohio (Indiana, Kentucky, Michigan, Pennsylvania, or West Virginia).

☐ The facility is located in the following state:

If the renewable energy resource generation facility is not located in Ohio, Indiana, Kentucky, Michigan, Pennsylvania, or West Virginia, you are required to submit a study by one of the regional transmission organizations (RTO) operating in Ohio, either PJM or Midwest ISO, demonstrating that the power from your facility is physically deliverable into the state of Ohio. The study may be conducted by someone other than the RTO provided that the RTO approves the study. This study must be appended to your application as an exhibit.

G. Certification Criteria 2: Qualified Resource or Technology

You should provide information for only one resource or technology on this application; please check and/or fill out only one of the sections below. If you are applying for more than one resource or technology, you will need to complete a separate application for each resource or technology.

G.1. For the resource or technology you identify in Sections G.4 – G.13 below, please provide a written description of the system.

See Attachment 2

G.2. Please include a detailed description of how the output of the facility is going to be measured and verified, including the configuration of the meter(s) and the meter type(s).

The net generation from each unit is measured using the meters identified in Section N.

G.3. Please attach digital photographs that depict an accurate characterization of the renewable generating facility. Please indicate the date(s) the photographs were taken. For existing facilities, these photographs must be submitted for your application to be reviewed. For proposed facilities or those under construction, photographs will be required to be filed within 30 days of the on-line date of the facility.

INSERT PHOTOGRAPH(S)



Bay Shore
Power
Company –
Unit #1

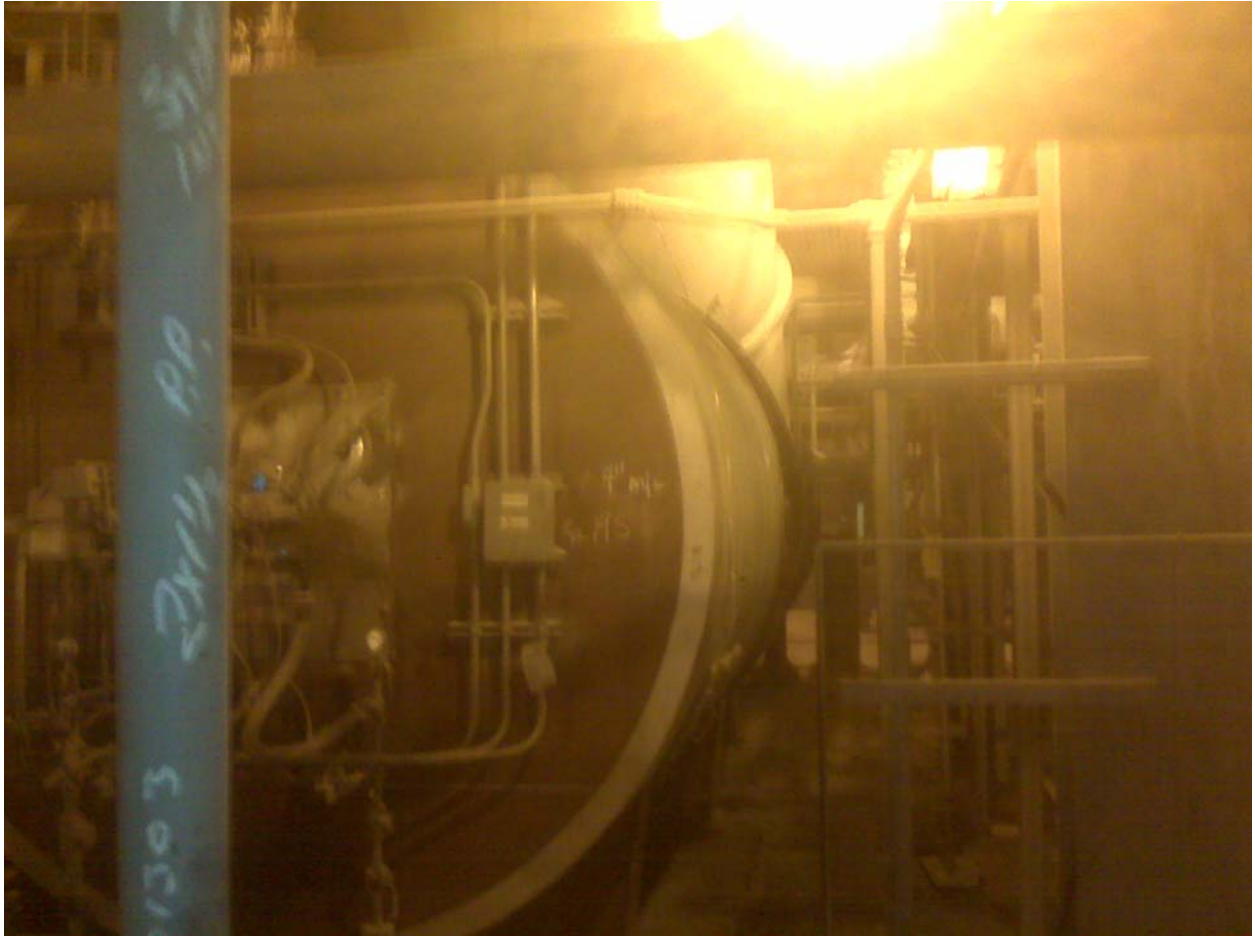
Boiler Unit #1



Boiler Unit #1



Boiler Unit #1



The Applicant is applying for certification in Ohio based on the following qualified resource or technology (Sec. 4928.01 O.R.C.):

G.4 __ SOLAR PHOTOVOLTAIC

Total PV Capacity (DC):

Total PV Capacity (AC):

Expected Capacity Factor:

Capacity factor is the ratio of the energy produced to the maximum possible at full power, over a given time period. Capacity factor may be calculated using this formula:

Projected annual generation (kWh or MWh) divided by (the nameplate capacity kW or MW) times (8760 hours—annual)

Anticipated Annual output in kWh/yr:

Location of the PV array: __ Roof __ Ground __ Other

of Modules and/or size of the array:

G.4a PV Modules

For each PV module, provide the following information:

Manufacturer:

Model and Rating:

G.5 __ SOLAR THERMAL (FOR ELECTRIC GENERATION)

G.6 __ WIND

Total Nameplate Capacity (kilowatts AC): or kW DC:

Expected Capacity Factor:

Anticipated Annual Output in kWh/yr or MWh/yr:

of Generators:

G.6a Wind Generators

If your system includes multiple generators, please provide the following information for each unique generator you have in your system

Manufacturer:

Model Name and Number:

Generator Nameplate Capacity (kilowatts AC):

Wind Hub Height (ft):

Wind Rotor Diameter (ft):

G.7 __ HYDROELECTRIC ("hydroelectric facility" means a hydroelectric generating facility that is located at a dam on a river, or on any water discharged to a river, that is within or bordering this state or within or bordering an adjoining state (Sec. 4928.01(35) O.R.C.)

Check each of the following to verify that your facility meets each of the statutory standards (Sec. 4928.01(35) O.R.C.):

- (a) The facility provides for river flows that are not detrimental for fish, wildlife, and water quality, including seasonal flow fluctuations as defined by the applicable licensing agency for the facility.
- (b) The facility demonstrates that it complies with the water quality standards of this state, which compliance may consist of certification under Section 401 of the "Clean Water Act of 1977," 91 Stat. 1598, 1599, 33 U.S.C. 1341, and demonstrates that it has not contributed to a finding by this state that the river has impaired water quality under Section 303(d) of the "Clean Water Act of 1977," 114 Stat. 870, 33 U.S.C. 1313.
- (c) The facility complies with mandatory prescriptions regarding fish passage as required by the Federal Energy Regulatory Commission license issued for the project, regarding fish protection for riverine, anadromous, and catadromus fish.
- (d) The facility complies with the recommendations of the Ohio Environmental Protection Agency and with the terms of its Federal Energy Regulatory Commission license regarding watershed protection, mitigation, or enhancement, to the extent of each agency's respective jurisdiction over the facility.
- (e) The facility complies with provisions of the "Endangered Species Act of 1973," 87 Stat. 884, 16 U.S.C. 1531 to 1544, as amended.
- (f) The facility does not harm cultural resources of the area. This can be shown through compliance with the terms of its Federal Energy Regulatory Commission license or, if the facility is not regulated by that commission, through development of a plan approved by the Ohio Historic Preservation Office, to the extent it has jurisdiction over the facility.
- (g) The facility complies with the terms of its Federal Energy Regulatory Commission license or exemption that are related to recreational access, accommodation, and facilities or, if the facility is not regulated by that commission, the facility complies with similar requirements as are recommended by resource agencies, to the extent they have jurisdiction over the facility; and the facility provides access to water to the public without fee or charge.
- (h) The facility is not recommended for removal by any federal agency or agency of any state, to the extent the particular agency has jurisdiction over the facility.

G.8 __ GEOTHERMAL

G.9__ SOLID WASTE (as defined in ORC section 3734.01), electricity generation using fuel derived from solid wastes through fractionation, biological decomposition, or other process that does not principally involve combustion. (Sec. 4928.01(A)(35) O.R.C.)

Identify all fuel types used by the facility and respective proportions (show by the percent of heat input):

G.10 X BIOMASS (includes biologically-derived methane gas, such as landfill gas)

Identify the fuel type used by the facility: Wood Pellet/Birquette

If co-firing an electric generating facility with a biomass energy resource, the proportion of fuel input attributable to the biomass energy resource shall dictate the proportion of electricity output from the facility that can be considered biomass energy.

G.10a List all fuel types used by the facility and respective proportions (show by the percent of heat input):

INITIAL PHASE:

Petcoke	90% - 100%
Wood Pellet/Briquette	0% - 10%
Fuel oil for flame stabilization and startup	<10%

LONGER-TERM GOALS:

Petcoke	75% - 100%
Wood Pellet/Briquette	0% - 25%
Fuel oil for flame stabilization and startup	<10%

G.10b Please attach the formula for computing the proportions of output per fuel type by MWh or kWh generated. See Attachment 1.

G.11 __ FUEL CELL (any fuel cell used in the generation of electricity, including, but not limited to, a proton exchange membrane fuel cell, phosphoric acid fuel cell, molten carbonate fuel cell, or solid oxide fuel cell; Sec. 4928.01(35)(A) O.R.C.).

Identify all fuel types used by the facility and respective proportions:

G.12 __ STORAGE FACILITY

If using compressed air or pumped hydropower, the renewable energy resource used to impel the resource into the storage reservoir is (include resource type and facility name):

H. Certification Criteria 3: Placed in Service Date (Sec. 4928.64. (A)(1) O.R.C.)

The Renewable Energy Facility:

__ has a placed-in-service date before January 1, 1998; (month/day/year):

X has a placed-in-service date on or after January 1, 1998; (month/day/year): 12/31/2000

X has been modified or retrofitted on or after January 1, 1998; (month/day/year): 11/6/09

Please provide a detailed description of the modifications or retrofits made to the facility that rendered it eligible for consideration as a qualified renewable energy resource. In your description, please include the date of initial operation and the date of modification or retrofit to use a qualified renewable resource. Please include this description as an exhibit attached to your application filing and identify the subject matter in the heading of the exhibit.

Please see Attachment 2.

___ Not yet online; projected in-service date (month/day/year):

H.1 Is the renewable energy facility owner a mercantile customer?

ORC Sec. 4928.01 (19) "Mercantile customer" means a commercial or industrial customer if the electricity consumed is for nonresidential use and the customer consumes more than seven hundred thousand kilowatt hours per year or is part of a national account involving multiple facilities in one or more states.

X No

__ Yes

Has the mercantile customer facility owner committed to integrate the resource under the provisions of Rule 4901:1-39-08 O.A.C?

X No

__ Yes

If yes, please attach a copy of your approved application as an exhibit to this filing.

I. Facility Information

The nameplate capacity of the entire facility in megawatts (MW): See table below.

If applicable, what is the expected heat rate of resource used per kWh of net generation:

Historically, this unit has operated at a heat rate in the range of 9,500 to 10,200. Future heat rate is expected to be in the range of 9,400 to 10,100 BTU/kWh

Number of Generating Units: 1

I.1 For each generating unit, provide the following information:

In-Service date of each unit	The nameplate capacity of each unit in megawatts (MW)	Projected Annual Generation (Millions MWHs)	Expected Annual Capacity Factor %
Unit #1 – 12/31/2000	136 MWs	0.9 to 1.1 MWHs	80% to 95%

(To expand the number of rows if more units need to be reported, place your cursor in the bottom right cell and hit tab).

J. Regional Transmission Organization Information

J.1 In which Regional Transmission Organization area is your facility located:

☐ Within Geographic Area of PJM Interconnection, L.L.C.

☒ Within Geographic Area of Midwest ISO

☐ Other (specify):

J.2 Are you a member of a regional transmission organization?

☒ Yes; specify which one: Midwest ISO and PJM, LLC

☐ No; explain why you are not a member of a regional transmission organization:

J.3 Balancing Authority operator or control area operator for the facility:

☐ PJM

☒ Midwest ISO

☒ Other (specify): American Transmission Systems, Incorporated, local balancing authority

K. Attribute Tracking System Information

Are you currently registered with an attribute tracking system: ☐ Yes ☒ No

In which attribute tracking system are you currently registered or in which do you intend to register (*the tracking system you identify will be the system the PUCO contacts with your eligibility certification*):

☒ GATS (Generation Attribute Tracking System)

☐ M-RETS (Midwest Renewable Energy Tracking System)

☐ Other (specify):

K.1 Enter the generation ID number you have been assigned by the tracking system: This generation ID number will be provided once it becomes available.[Do we have a number?]

If the generation ID number has not yet been assigned, you will need to provide this number to the PUCO within 15 days of your facility receiving this number from the tracking system).

L. Other State Certification

Is the facility certified by another state as an eligible generating resource to meet the renewable portfolio standards of that state?

☐ Yes

☒ No

L.1 If yes, for each state, provide the following information:

Name of State	State Certification Agency	State Certification Number	Date Issued

(To expand the number of rows if more units need to be reported, place your cursor in the bottom right cell and hit tab).

M. Type of Generating Facility

Please check all of the following that apply to your facility:

- ☐ Utility Generating Facility:
 - ☐ Investor Owned Utility
 - ☐ Rural Electric Cooperative
 - ☐ Municipal System
- ☒ Electric Services Company (competitive retail electric service provider certified by the PUCO)
- ☐ Distributed Generation with a net metering and interconnection agreement with a utility.
Identify the utility:
- ☐ Distributed Generation with both on-site use and wholesale sales.
Identify the utility with which the facility is interconnected:
- ☐ Distributed Generation, interconnected without net metering.
Identify the utility with which the facility is interconnected:

Note: if the facility does not yet have an interconnection agreement with a utility or transmission system operator, please note here the status of the application for such an agreement:

N. Meter Specifications

All facilities are required to measure output with a utility grade meter. Please provide this information for each meter used in your system.

Please see Attachment 3 for Meter Specifications

Manufacturer: Siemens

Serial Number: 680-582-908

Type: Utility Grade Watt Hour - Var Hour meter

Date of Last Certification: December 11, 2007

Attach a photograph of the meter with date image taken. The meter reading must be clearly visible in the photograph. See photo attachment Bay Shore Unit #1- Meter.

Report the total meter reading number at the time of the photograph and specify the appropriate unit of generation (e.g., kWh): 668,527.7 MWHs

INSERT PHOTOGRAPH(S)

The Public Utilities Commission of Ohio reserves the right to verify the accuracy of the data reported to the tracking system and to the PUCO.

Attachment 1 –Formula for calculation of Renewable Energy Credits

Formula to calculate RECs:

$$MWH_{REC} = \left(\frac{m_b \bullet HHV_b}{m_b \bullet HHV_b + m_p \bullet HHV_p} \right) \bullet MWH_{NET, MEASURED}$$

Where,

MWH_{REC} = renewable energy credits

m_b = biofuel mass used for electrical generation

m_p = petcoke mass used for electrical generation

HHV_b = biofuel heating value

HHV_p = petcoke heating value

$MWH_{NET, MEASURED}$ = net megawatt hours measured for a given time period

Notes:

1. In the case of multiple biofuels this formula would be expanded to include $m_{b,1}...m_{b,x}$ and $HHV_{b,1}...HHV_{b,x}$ where x is the number of biofuels in use

Example Calculation:

During a 30 day period, Bay Shore Unit 1 generated steadily at 100 MWe based on its net meter. During the same 30 day period 35,000 tons of petcoke was burned along with 5,000 tons of biofuel. Lab analysis has shown the petcoke to have a HHV of 14,000 Btu/Lb and the biofuel to have a HHV of 8,000 Btu/Lb.

$$MWH_{REC} = \left(\frac{5,000\text{tons} \bullet 2,000\text{lb} / \text{ton} \bullet 8,000\text{Btu} / \text{lb}}{5,000\text{tons} \bullet 2,000\text{lb} / \text{ton} \bullet 8,000\text{Btu} / \text{lb} + 35,000\text{tons} \bullet 2,000\text{lb} / \text{ton} \bullet 14,000\text{Btu} / \text{lb}} \right) \dots$$

$$\dots \bullet 100\text{MWe} \bullet 30\text{Day} \bullet 24\text{H} / \text{Day}$$

$$MWH_{REC} = 5,434$$

The number of Renewable Energy Credits generated during the 30 day period is 5,434.

Attachment 2 –Bay Shore Unit #1

OVERVIEW OF CURRENT OPERATIONS

Bay Shore Power Company was formed in 1998 to construct and operate a boiler and related facilities capable of burning petcoke from an adjacent refinery to produce and deliver steam. The boiler went into service on or about December 31, 2000. Petcoke is transported above ground from a nearby refinery and stored in plant silos or stockpiled outdoors. Petcoke is weighed during transport to the plant silos by a belt scale. Petcoke feeders have integrators that are used to determine the quantity of petcoke burned. A small conveyor is used to intermittently introduce inert material to the petcoke stream to improve boiler operations. Deluge systems protect the petcoke handling system from fire.

Steam generated by the Bay Shore Power Company is sold to FirstEnergy Generation Corp. to power its turbine generator for Bay Shore Unit 1. Under an amendment to the steam purchase agreement, FirstEnergy Generation Corp. will provide at no cost to Bay Shore Power Company biomass fuel for use in cofiring the boiler. In return, FirstEnergy Generation Corp. will acquire title to all environmental attributes produced by using steam to power Bay Shore Unit 1.

RETROFITS FOR Cofiring the Boiler with Biomass

Biofuel Transportation, Handling, and Storage

Biofuel will be transported to the plant by leased railcars. A new rail unloading machine will be purchased and utilized to offload biofuel. The certified rail car weights will be used to determine the mass of biofuel that is unloaded and subsequently burned. The biofuel will be transported either by front end loader or intermediate conveyor from the rail car unloader to the existing inert material conveyor. The inert material conveyor must be upgraded with covers, a belt scale, and larger receiving hopper. The inert material conveyor will be used to introduce biofuel into the petcoke stream at the desired rate. The leased railcars will be kept onsite and used for storage of the biofuel. Similarly, biofuel may also be delivered by truck.

Safety Measures

Biofuel is more volatile than coal and its dust, in the necessary concentration in air, creates a risk of explosion given an ignition source. With this in mind, mechanical dust collectors and/or sprays may be added at significant dust points. In general, transfer points create dust more so than other points in the coal handling system. Therefore dust mitigation technology may be placed at strategic locations. In addition to engineering controls, housekeeping will be a significant focus to prevent dust settling on horizontal surfaces where it can build up over time. Existing fire suppression systems will be used to protect the coal handling system.

Environmental

On September 18, 2009, FirstEnergy Generation Corp. requested from Ohio EPA a six month research and development permit exemption under O.A.C. Section 3745-31-03 (3) (d) to test co-firing of biomass fuels at Bay Shore Units 1, 2, 3, and 4, beginning the week of October 12, 2009. A letter of approval from Ohio EPA was received by FirstEnergy Generation Corp. on October 12, 2009. Please find a copy of this letter attached.

Attachment 3 - Meter Specifications

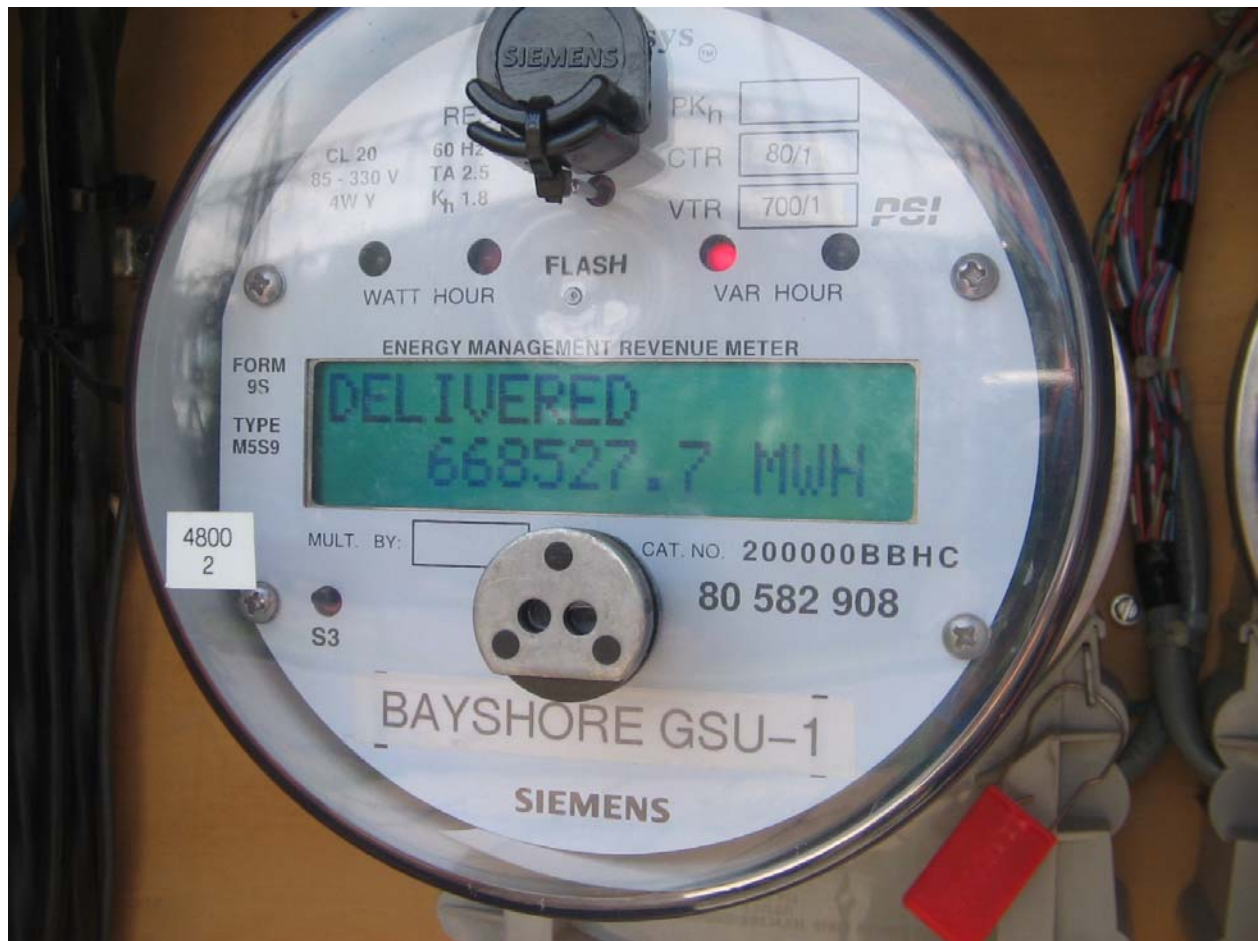
Meter Specifications

Bay Shore Plant

Utility Grade Meter (Revenue Meter)

<u>Generating Units</u>	<u>Manufacturer</u>	<u>Serial Number</u>	<u>Type</u>	<u>Date of Last Certification</u>	<u>Next Certification Date</u>
BS1	Siemens	680-582-908	2510	December 11, 2007	by 12/31/2009

Bay Shore Unit #1 – Meter





State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

OHIO E.P.A.

MAILING ADDRESS:

OCT -8 2009 P.O. Box 1049
Columbus, OH 43216-1049

ENTERED DIRECTOR'S JOURNAL

91 7108 2133 3932 4442 3692

October 8, 2009

Mr. Fred J. Starheim, Ph.D, CCM
Manager, Permitting and Compliance
FirstEnergy Generation Corp.
76 South Main Street
Akron, OH 44308

I certify this to be a true and accurate copy of the
official documents as filed in the records of the Ohio
Environmental Protection Agency.

By: [Signature] Date: 10-8-09

Re: PTI exemption request for a Biomass Test Burn at Bay Shore Units 1 through 4

Dear Mr. Starheim:

I have received your letter dated September 18, 2009 requesting a temporary exemption to conduct the biomass test burn for up to six months from permit-to-install requirements. FirstEnergy Generation Corp. (First Energy) plans to conduct a biomass trial burn in the Units 1, 2, 3 and/or 4 (OEPA emissions units B006, B002, B003 and B004) at the Bay Shore facility located in Oregon, Ohio. The purpose of the test burn is to evaluate the feasibility of using renewable fuels as encouraged by Senate Bill 221 and determine the air quality impacts from the fuel change.

FirstEnergy Generation Corp. - Bay Shore Station is proposing to utilize the following existing boilers for the above mentioned tests.

B002 Unit 2 - 859 mmBtu/hr coal-fired boiler with low-NOx burners and ESP
B003 Unit 3 - 835 mmBtu/hr coal-fired boiler with low-NOx burners and ESP
B004 Unit 4 - 1,197 mmBtu/hr coal-fired boiler with low-NOx burners and ESP
B006 Unit 1 - 1,764 mmBtu/hr coke/coal-fired CFB boiler with baghouse

B002-B004 and B006 have SO₂ and NO_x continuous emissions monitoring systems (CEMS) and continuous opacity monitoring systems (COMS). B006 also has a CO CEMS.

It is my understanding that FirstEnergy will co-fire up to a 10% compressed and/or extruded wood and agricultural products with coke in Unit 1 and up to 5% compressed and/or extruded wood and agricultural products with coal in Units 2, 3, and/or 4. The biomass fuel will range in size from 8mm x 22mm pellets to 75mm x 25mm pucks.

OAC rule 3745-31-03(A)(3)(d) allows the Director of Ohio EPA at his discretion to exempt the installation and operation or modification of an air contaminant source from

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korfseki, Director

Ohio EPA is an Equal Opportunity Employer

Printed on Recycled Paper



*FirstEnergy Corporation - Toledo Edison Bay Shore Plant
Director's exemption letter
Page 2*

the requirement to obtain a permit-to-install for a period of up to six months for purposes of research and development of more effective prevention or control of air pollutant emissions or of more efficient combustion of coal. After considering your submittal, your request to conduct the biomass trial burn is granted, provided you comply with the following conditions:

1. This letter does not exempt FirstEnergy from compliance with any other applicable regulations.
2. The operation shall be in accordance with the information contained in your request letter to the Toledo Division of Environmental Services and Ohio EPA, dated September 18, 2009.
3. FirstEnergy shall notify Matt Stanfield of the Toledo Division of Environmental Services at 348 South Erie Street in Toledo, Ohio, telephone number 419-936-3938, at the beginning and completion of the operation.
4. FirstEnergy shall maintain records of the dates of operation and the amount of material burned each day of testing.
5. FirstEnergy shall analyze representative samples of the biomass fuel, coal, and coke for ash content, sulfur content, heat content, moisture content, arsenic, beryllium, cadmium, manganese, chromium, copper, chlorine, lead, mercury, nickel, selenium, and zinc.
6. FirstEnergy shall summarize and make available to Ohio EPA the NO_x, SO₂ and CO CEMS data and COMS data from the week prior to the burn and compare to the data from each respective test day to evaluate any potential emissions changes while burning the blended biomass/coal and biomass/coke fuel.
7. FirstEnergy shall perform a stack test at the common stack serving B002 through B004 to determine CO emissions while burning coal only to establish baseline emissions and a stack test to determine CO emissions while burning the biomass/coal blend.
8. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test burn and acquire data and information as necessary to ensure that the operation of the emissions unit, the CO stack testing procedures, the NO_x, SO₂ and CO CEMS and COMS provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.



Public Utilities Commission

Application for Certification as an
Eligible Ohio Renewable Energy
Resource Generating Facility

*FirstEnergy Corporation - Toledo Edison Bay Shore Plant
Director's exemption letter
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submitted to Matt Stanfield of the Toledo Division of Environmental Services within 30 days following completion of the test(s).

9. The results of the project evaluation and completion shall be kept on site and made available upon request.
10. This letter of exemption shall be effective on October 12, 2009 and shall expire on April 12, 2009.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Sudhir Singhal of the Division of Air Pollution Control in Central Office at (614) 644-3684 or Matt Stanfield of Toledo Division of Environmental Services at (419) 936-3938.

Sincerely,

Chris Korleski
Director

cc: Donald Vanterpool, Legal Office
Mike Hopkins, Central Office, DAPC
Bob Hodanbosj, Central Office, DAPC

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Case No(s). 09-1042-EL-REN

Summary: Application Case No. 09-1042-EL-REN submitted by Joseph E. Zuschak of FirstEnergy Solutions on behalf of David L. Plusquellic and Charles R. Ferrell, Jr. electronically filed by Mr. Joseph E Zuschak on behalf of FirstEnergy Solutions and Mr. Joseph E. Zuschak